

# Trace Minerals & Pregnancy

Story & photo by  
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When Reinaldo Cooke's wife was pregnant with each of their three kids, she was advised by her obstetrician to do

two things: gain 2 pounds (lb.) per month of pregnancy and take prenatal vitamins. While given plenty of nutritional tips, additional trace minerals weren't on the list. But that's where pregnant cows and pregnant humans differ, Cooke said, in his

Jan. 27 Cattlemen's College® presentation at the Cattle Industry Convention in San Diego, Calif.

The associate professor and beef cattle specialist with Oregon State University said since cattle eat a diet lacking in

natural diversity, trace mineral supplementation is important. Zinc, cobalt, manganese and copper are all essential for proper fetal development.

His research explored how supplementation during the last trimester of gestation affected the offspring for the rest of its life through fetal programming. Cooke concluded that when trace minerals, especially organic trace minerals, were fed to pregnant cows, their calves were born on the right track and stayed the course. They grew faster, stayed healthier and were better equipped to handle whatever stress came their way.



Since cattle eat a diet lacking in natural diversity, trace mineral supplementation is important, said Reinaldo Cooke, associate professor and beef cattle specialist with Oregon State University.

Highlights included lower birth weights, higher weaning weights and increased calf value for calves born to cows supplemented with either organic or inorganic trace minerals.

Cooke said organic trace mineral supplementation increased weaned calf value by \$70 compared to the control group, with an extra feeding cost of only \$3.10 per cow. Inorganic trace mineral supplementation increased weaned calf value by \$32 compared to the control group, with an extra cost of \$2 per cow.

He says while the results are convincing, it's important to remember that trace mineral supplementation will not make up for an otherwise deficient cow.

"A cow has got to be in a good body condition score first," Cooke says. "You can't let your cows starve but provide them with trace minerals and get the same results. It's just like with my wife. If you go and ask her doctor which is more important, gaining the weight or taking the vitamins, he'll say gaining the appropriate weight."



**Editor's Note:** Katrina Huffstutler is a freelancer from Electra, Texas. This article was written as part of Angus Media's online coverage of the 2016 Cattle Industry Convention & NCBA Trade Show. For additional coverage, visit the Newsroom at [www.4cattlemen.com](http://www.4cattlemen.com).